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EXAMINER

LEVI, DAMEONE

ART UNIT PAPER NUMBER

2841

DATE MAILED 12/26/2002

Please find below and or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/824,481

Applicant(s)

SEKI ET AL

Examiner

Dameon E Levi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 November 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4 and 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews et al US Patent 5598063 in view of Mochiduki et al US Patent 6274973.**

**Regarding claim 1,** Matthews et al discloses

- a luminous bulb in which a luminous material is enclosed and a pair of electrodes are opposed in the luminous bulb; and a pair of sealing portions for sealing a pair of metal foils electrically connected to the pair of electrodes, respectively (for example, see element 12, 20, 22, 16, 18, Figs 1, 2)
- wherein at least one of the pair of sealing portions is provided with at least one constricted portion whose length in a direction substantially perpendicular to the surface of the metal foil in the sealing portion is smaller than that of other portions in the sealing portion (for example, see constrictions adjacent elements

25, 28, Figs 3, 4)

formed in an area of the sealing portion where the metal foil is disposed.

Mochiduki et al discloses a luminous bulb wherein at least one of the constricted portions is formed in an area of the sealing portion where the metal foil is disposed (for example, see constricted portions adjacent element 16a, 16b Fig 5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed constricted portions in the sealing portion as taught by Mochiduki et al in the luminous bulb as taught by Matthews et al for the purpose of tightly sealing the sealing portion in the vicinity of the metal foil thereby ensuring good contact therein.

**Regarding claim 2,** Matthews et al discloses the instant claimed invention except wherein at least one of the constricted portions is provided in a portion relatively nearer to the luminous bulb side, rather than a center of the sealing portion.

Mochiduki et al discloses wherein at least one of the constricted portions is provided in a portion relatively nearer to the luminous bulb side, rather than a center of the sealing portion (for example, see constricted portions adjacent element 16a, 16b Fig 5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed constricted portions relatively nearer to the luminous bulb side in the sealing portion as taught by Mochiduki et al in the luminous bulb as taught by Matthews et al for the purpose of tightly sealing the sealing portion and thereby ensuring good contact therein.

25, 28, Fig 2).

**Regarding claim 4**, Matthews et al discloses wherein each of the pair of metal foils includes an external lead on a side opposite to a side electrically connected to a corresponding electrode of the pair of electrodes, and at least one of the constricted portions is formed in an area between an end of the electrode and an end of the external lead of at least one of the sealing portions (for example, see elements 28, see Fig 2)

Regarding claim 9, Matthews et al discloses herein each of the pair of sealing portions has a shrink seal structure (for example, see Figs 1-7)

Regarding claim 10, Matthews et al discloses wherein ends of the pair of sealing portions on a side opposite to the luminous bulb side are tapered (for example, see Figs 1-7)

**Regarding claim 11**, Matthews et al discloses wherein each of the pair of metal foils is attached tightly to a glass portion extended from the luminous bulb, and each of the pair of metal foils is a molybdenum foil (for example, see Figs 1-7, see column 2, line 60-column 3, line 10)

**Regarding claim 12**, Mori et al discloses wherein the luminous material comprises at least mercury (for example, see column 4, lines 43-47)

**Regarding claim 13**, the use of a reflecting mirror for reflecting light emitted from discharge lamps is conventional in the art in order to spread and concentrate the light in

**Regarding claim 14**, Matthews et al discloses a discharge lamp comprising a luminous bulb in which a luminous material is enclosed and a pair of electrodes

- are opposed in the luminous bulb; and a pair of sealing portions for sealing a pair of metal foils electrically connected to the pair of electrodes, respectively (for example, see element 12, 20, 22, 16, 18, Figs 1, 2)
- each of the pair of sealing portions including a shrink seal structure and each of the pair of metal foils including an external lead on a side opposite to a side electrically connected to a corresponding electrode of the pair of electrodes; wherein at least one of the pair of sealing portions is provided with at least one constricted portion whose length in a direction substantially perpendicular to the surface of the metal foil in the sealing portion is smaller than that of other portions in the sealing portion, (for example, see constrictions adjacent elements 25, 28, Fig 2, see elements 25, 28).

Matthews et al does not disclose wherein at least one of the constricted portions is formed in an area between an end of the electrode and an end of the external lead of at least one of the sealing portions.

Mochiduki et al discloses a luminous bulb wherein at least one of the constricted portions is formed in an area between an end of the electrode and an end of the external lead of at least one of the sealing portions (for example, see constricted portions adjacent element 16a, 16b Fig 5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the

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tightly sealing the sealing portion in the vicinity of the metal foil thereby ensuring good contact therein.

**Regarding claim 15**, Matthews et al discloses wherein the length of at least one of the constricted portions in the direction substantially perpendicular to the surface of the metal foil in the sealing portion is 70 to 90% of the length of the other portions without the constricted portion (for example, see Fig 2)

**Regarding claim 16**, Matthews et al discloses wherein one of the other portions is the sealing portion where the electrode is disposed (for example, see Fig 2)

**Regarding claim 17**, Matthews et al discloses wherein one of the other portions is the sealing portion where the electrode is disposed (for example, see Fig 2)

**Regarding claim 18**, Matthews et al discloses the instant claimed invention except wherein at least one of the constricted portions is provided in a portion relatively nearer to the luminous bulb side, rather than a center of the sealing portion.

Mochiduki et al discloses wherein at least one of the constricted portions is provided in a portion relatively nearer to the luminous bulb side, rather than a center of the sealing portion (for example, see constricted portions adjacent element 16a, 16b Fig 5).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed constricted portions relatively nearer to the luminous bulb side in the sealing portion as taught by Mochiduki et al in the luminous

**Regarding claim 20**, Matthews et al discloses wherein ends of the pair of sealing portions on a side opposite to the luminous bulb side are tapered(for example, see Figs 1-7)

**Regarding claim 22**, Matthews et al discloses wherein the luminous material comprises at least mercury (for example, see column 4, lines 43-47).

Applicant's arguments with respect to claims 1-4 and 9-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

mailed until after the end of the THREE-MONTH shortened statutory period, then the



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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E Levi whose telephone number is (703) 305-0426. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (703) 308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0058.

Dameon E Levi  
Examiner  
Art Unit 2841

DEL  
December 20, 2002